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10/729,477	12/05/2003	Kwang-Hyun Shim	51876P434	3085

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER	
PIERCE, DAMON JOSEPH	
ART UNIT	PAPER NUMBER
3714	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/729,477	SHIM ET AL.	
	Examiner	Art Unit	
	DAMON PIERCE	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1, and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over "A Network Architecture for Multiuser Networked Games on Demand" Pps. 1815-1819 to Bangun et al. (Bangun) in view of US Pat. #6,477,561 to Robsman.

In Reference to Claim 1, Bangun discloses a distance based distributed online game server system (Pg. 1815, First Column, Second Paragraph, "wide area networks", also known as WAN is used for providing online games including their regions, worlds, and characters), the distance based distributed online game server system comprising:

a session server (Fig. 1 on Pg. 1816, Second Column, First Paragraph, "game session" and Pg. 1818, 2nd Col., 2nd Parg., "Front-End Server", authenticates a

player's status and game logic including player's region and character information);

a database server (Pg. 1818, 1st Column, 3rd Paragraph, "CPU Server", manages player and character information including player's account information);

a non-player character (NPC) server (Pg. 1818, First Column, Second Paragraph, "Games Data Server ", manages game data including of all characters and images of game including non-player character(s));

a game server (Pg. 1818, First Column, Second Paragraph, "Games Data Server" for providing and managing game service); and

a real-time download server (Pg. 1815, Second Column, 6th paragraph, "real-time visual and audio imagery", indicates that there is a source for providing a real-time downloading service to the player).

However, Bangun fails to disclose wherein the game server calls an event processing function upon receiving an event, the event processing function to assign an available thread from a thread pool to process an event.

Robsman discloses a server that calls an event processing function upon receiving an event, the event processing function to assign an available thread from a thread pool to process an event in order to optimize the processing of information over the game server (col. 1, 10-18). Banguns method is all about optimizing and providing better networks to gamers.

It would have been obvious at the time of the invention to a person of ordinary skill in the art to combine the gamer server of Bangun with the thread optimization process of Robsman in order to optimize game serving processes.

In Reference to Claim 3, Bangun discloses the distance based distributed online game server system as recited in claim 1, wherein there is a game server ("Games Data server") is managed by the NPC server ("Games Data server"), the database ("CPU server") server and the session server ("Front-End Server", all servers work together and manage each other to track and provide mulitplayer games efficiently).

3. Claim 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over "A Network Architecture for Multiuser Networked Games on Demand" Pps. 1815-1819 to Bangun et al. (Bangun) in view of US Pat. #6,477,561 to Robsman in view of Kohan – Immortal Sovereigns User Manual Pps. 4-5, 11, 13-16 (Kohan).

In Reference to Claim 2, Bangun discloses the distance based distributed online game server system as recited in claim 1, where the session server provides the region information (see rejection of claim 1). However, Bangun fails to disclose a server address and a port number of the game server assigned to a player within corresponding region.

Kohan discloses a server address and a port number (Pg. 15 "IP/Port", which indicates the address of the player). It is knowledge generally available to one of ordinary skill in the art that devices connected in WAN are given IP

addresses and Port numbers in order to identity the players in a multiplayer gaming system.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine session server of Bangun with the server addresses and port number of Kohan in order to receive and send game data to the proper player location in the network. Actually, IP addresses and port numbers are inherent and required properties when connecting a device over the Internet.

In Reference to Claim 5, Bangun discloses the distance based distributed online game server system as recited in claim 1, wherein a transmission control protocol (TCP) or a reliable user datagram protocol (RUDP) is used in communication between the player for obtaining reliability of the system and an area of interest method is used for reducing system load (TCP/IP is a set of well known protocols in Internet networking).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over "A Network Architecture for Multiuser Networked Games on Demand" Pps. 1815-1819 to Bangun et al. (Bangun).

In Reference to Claim 4, Bangun discloses the distance based distributed online game server system as recited in claim 1, wherein when a region is added ("level data" can be added during any time of the game). However, Bangun fails to disclose an added game server to manage the added region.

Bangun discloses the "games data server" which is capable of managing the added region. Thus, it is unnecessary to add another game server to manage a region when the server currently managing the other regions is well within the power to manage any other added data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to add extra game servers to the game server of Bangun in order to improve the serving power of an online game system.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over "A Network Architecture for Multiuser Networked Games on Demand" Pps. 1815-1819 to Bangun et al. (Bangun) in view of US Pat. #6,477,561 to Robsman in view of "Distributed Systems Support for Networked Games" Pps. 99-104 to Tzi-cker Chiueh (Chiueh).

In Reference to Claim 6, Bangun discloses the distance based distributed online game server system as recited in claim 1 (see rejection of claim 1). However, Bangun fails to disclose wherein movements or changes of characters are predicted by dead-reckoning within a limit of error.

Chiueh discloses dead-reckoning within a limit of error (Pg. 103, 1st Col., 1st Parg.). It is knowledge generally available to one of ordinary skill in the art that the dead reckoning technique is used in video games in order to predict objects movements.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the online game server system of Bangun with the dead reckoning technique of Chiueh in order to reduce network bandwidth usage as taught by Chiueh (Pg. 99 in Abstract).

Response to Arguments

6. Applicant's arguments filed 12/14/07 have been fully considered but they are not persuasive.

7. In regards to claim 1, on pg. 4 of applicant's response, it is stated that Bangun fails to teach or suggest the following elements 1) a non-player character (NPC) server for managing data and processing scripts of non-player character by artificial intelligence; and 2) a "real-time download server for provides a real-time downloading service to a the player". In regards to issue 1) Bangun discloses playing video games via a network and it is well known that video games use non-player characters and artificial intelligence informally known as "the computer" in video gaming. In Bangun the "Games Data Server" and/or the "CPU Servers" is capable of providing non-player characters for a player to compete against. In regards to issue 2) Bangun discloses real-time play in video games via a network. A network and server that downloads gameplay and provides real-time play to gamers upon entering a game is "a real-time download server".

8. In regards to claims 1-6 see rejection under new grounds of rejections above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAMON PIERCE whose telephone number is (571)270-1997. The examiner can normally be reached on Mon - Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hotaling can be reached on 571-272-4437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John M Hotaling II/
Primary Examiner, Art Unit 3714

DJP